AAR-100

Human Factors Newsletter # 00-19

(November 4, 2000 – November 17, 2000)

SABET: First line ATC supervisors from Indianapolis and Houston ARTCC are visiting the William J. Hughes Technical Center's Human Factors Laboratory to evaluate simulation scenarios that will be used for the Study of an ATC Baseline for the Evaluation of Team configurations (SABET). SABET is scheduled to start on January 8, 2001 and will have 30 enroute controller participants. It will end in March 2001. (B. Willems, WJHTC)

Action Plan 12 Meeting: Human factors representatives met in Luxembourg, November 11-17, to participate with EUROCONTROL scientists and air traffic subject matter experts representing the European states in completing the data reduction phase of the FAA/EUROCONTROL Action Plan 12, using the input from the August FAA/EUROCONTROL meeting at CAMI. Representatives from the Air Traffic Service, Evaluations and Investigations Staff (AAT-20) and NASA also participated. The data reduction and analysis will be used as part of the FAA/EUROCONTROL Action Plan 12 Work Product 1.2. Results from this meeting will be used to shape the harmonized model for human error identification and analysis. Plans for activities on the next Action Plan work products were also coordinated. (P. Krois, AAR-100; J. Pounds, CAMI)

DOT Intermodal Security Technology Subgroup Visit: AAR-500 personnel briefed eight members of the DOT Intermodal Security Technology Subgroup on various aviation security programs. The aviation security human factors team (AAR-510) presented the following topics: enhancing screener performance through selection, training, testing, and monitoring; optimizing the system by identifying and resolving equipment constraints on the human; and maximizing the aviation security system efficiency and throughput without compromising effectiveness. AAR-510, Airport Security Technology Integration (ASTI), briefed on simulation and modeling tools developed as ASTI projects. The Coast Guard members of the subgroup expressed interest in acquiring copies of the SAFR and BlastFx tools to assist in conducting vulnerability assessments for seaports. These tools are available free of charge to other government organizations through the ASTI program. Over 350 copies have been distributed. (C. George, AAR-1)

IEEE International Carnahan Conference: Several human factors engineers from the Aviation Security Human Factors Program (AAR-510) presented papers at the IEEE International Carnahan Conference on Security Technology. The papers included topics such as

the screener readiness test, the on-the-job mastery test, a bottle contents tester study, and a 3-dimensional x-ray evaluation. (C. George, AAR-1)

Modified Directed Trace and Non-directed Trace Procedures: AAR-510 received a final test and evaluation report for the evaluation of modified directed trace and non-directed trace procedures at Eppley Airfield and Stewart International Airport. This field evaluation was part of AAR-510's Strategic Implementation Plan for FY00. (C. George, AAR-1)

International Aviation Security Human Factors Technical Advisory Group: Representatives from the Aviation Security Human Factors Program (AAR-510) presented their recent research and development efforts at the 10th Meeting of the International Aviation Security Human Factors Technical Advisory Group in Seattle, Washington. Attending nations included the United States, the United Kingdom, Canada, and France. Human factors engineers from the Aviation Security Human Factors Program presented papers entitled Checkpoint Effectiveness and Efficiency, Checkpoint Resource Management, Field Comparison of CBT Systems, Human Factors Evaluation of the L3 3DX6000 eXaminer, Threat Image Projection (TIP) Optimization, Laboratory Validation of TIP, X-ray Image Selection Test, and the Development of the Screener Readiness Test. Each nation presented the results of recent research, and the group established international collaborative research projects for the next year. The next meeting is scheduled for June 2001 in Brussels, Belgium. (C. George, AAR-1)

Third International Symposium on Explosives Detection and Aviation Security Technologies: In October, AAR-530 sent over 900 mailings of an informational flyer for the Aviation Security Symposium to be held from November 27 through 30, 2001, in Atlantic City, New Jersey. Symposium topics include bulk detection, trace detection, deployment, aircraft hardening, human factors, airport security technology integration, and testing. (C. George, AAR-1)

Air Carrier Training: AAR-100 researchers participated in the industry-sponsored LOFT/LOE development and CRM development focus group meetings last week in Cincinnati, OH. In addition to working with the groups to determine improved methods for training development, the researchers presented findings from research on the Rapidly Reconfigurable Event-Set tool and findings from the Realistic Radio Communications study. The training developers incorporate this information into future training scenarios for air carrier crews. (E. Edens, AAR-100)

Scientific Award: Last week during their annual awards meeting, the South New Jersey Professional Societies conferred a major award on Ben Willems, ACT-530. Out of a field of 15 nominees, they selected Ben as Scientist of the Year. This was in recognition of his work on Decision Support Automation and his success in pulling all the pieces together to operate a very complex person-in-the-loop simulation. Ben Willems is the first human factors professional to receive this award in the South New Jersey area. (E. Stein, WJHTC)

HOCSR: The NAS Human Factors Branch (ACT-530), in collaboration with Lockheed-Martin, conducted an Early User Involvement Event (EUIE) in support of the Host and Oceanic Computer System Replacement (HOCSR) Program. During the EUIE, user representatives from the field exercised the computer-human interface of a monitor and control position and evaluated the human-

machine interaction with hardware racks by stepping through scripted procedures. Simulated faults were introduced into the system to demonstrate the visual and audible alarms. Human factors psychologists recorded observations of any difficulties users had in interacting with the system and administered a questionnaire to collect user feedback. (T. Yuditsky, WJHTC)

***More information on human factors research can be found at
the FAA Human Factors (AAR-100) web site:*** http://www.hf.faa.gov

Mark D. Rodgers
FAA (AAR-100)

CALENDAR

November 27-30, 2000 - *Third International Symposium on Explosives Detection and Aviation Security Technologies, Atlantic City, New Jersey.*

March 13-15, 2001 – *The Advanced Technology Electronic Defense Systems Conference and The Tactical Situational Awareness Symposium, Shelter Pointe Hotel and Marina on Shelter Island, San Diego, CA* mail to:AssenmacheTJ@navair.navy.mil

March 21-23, 2001 *– International Symposium on Smart Graphics, Hawthorne, NY* http://www.smartgraphics.org/

March 27-29, 2001- The Fifteenth Symposium on Human Factors in Aviation Maintenance, The Brewery Conference Centre, London, UK mail to: enquiries@conference consultancy.com

March 31 – April 5, 2001- CHI 2001, Seattle, WA http://www.acm.org/chi2001

June 3-8, 2001- Society for Information Display, International Symposium, Seminar & Exhibition, San Jose Convention Center, San Jose, CA mail to: pdrzaic@elink.com

August 5-10, 2001 – *9th International Conference on Human-Computer Interaction, New Orleans, LA* http://hcii2001.engr.wisc.edu/

October 2001- Annual Cabin Safety Research Technical Group Meeting, Taj Mahal Hotel and Casino, Atlantic City, NJ

Note: Calendar events in Italics are new since the last Newsletter

Comments or questions regarding this newsletter?
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